



JPIAMR Alignment Plan



A COMMON DEFINITION OF ALIGNMENT FOR JOINT PROGRAMMING

Alignment is the strategic approach taken by the Member States to modify their national programmes, priorities or activities as a consequence of the adoption of joint research priorities in the context of Joint Programming with a view to implement changes to improve efficiency of investment in research at the level of Member States and ERA. The state of alignment will change and develop over time.



Alignment of National and European research policies and programmes represents a challenge to JPIAMR but is essential to enable the research priorities outlined in the SRA to be addressed. It is important that a variety of funders at different levels (regional, national, European and international) are involved in this process and that the relevant countries and Member States are engaged. Alignment could involve a particular research area or specific topic or alignment with other JPI activities. Advantages to aligning include improving the quality of research, providing access to more research with relevance to national policy development and would contribute to innovation and economic sustainability and growth. It would also ensure that all available resources are better utilised for maximal societal impact and allow greater sight into the portfolio of projects that are funded in each country, preventing duplication of effort and identifying links that can be exploited.

OVERARCHING ACTIVITIES

A number of communication tools used to raise awareness to both the AMR community and a variety of stakeholders could include distribution of leaflets and copies of the SRA, clearly detailing the aim of the JPIAMR. Tailored presentations would also help with awareness and facilitate with aligning the community together. Videos and webinars may also be other mechanisms by which JPIAMR can communicate with the public. Identifying key departments and individuals within these departments would help support and engage the community in national discussions. Relevant individuals could be invited to the JPIAMR Management Board as guests and case studies of countries with experience could be made available to demonstrate good practice and also lessons learnt.

There are a number of ways to achieve alignment depending on the development of the research areas. These include initiation of new research activities, aligning and co-ordinating existing activities, data sharing, sharing of infrastructure, strategic collaborations with other projects and initiatives, training and mobility of researchers and foresight activities. The process of alignment requires common and or overlapping themes, time, networks and core topics as a starting point for discussion. Long term investment is also important to enable longer time strategies to develop. The selection of the most appropriate tools for alignment will be identified in the first instance by mapping exercises, networking workshops, think tanks and meetings. It is important to monitor and evaluate the short, medium and long term priorities of the Member States to identify and understand obvious opportunities and gaps. **There are a number of overarching activities that would facilitate alignment in the short (S), medium (M) and long term (L) and five areas within alignment that need to be considered for JPIAMR (Figure 1).**

ALIGNMENT

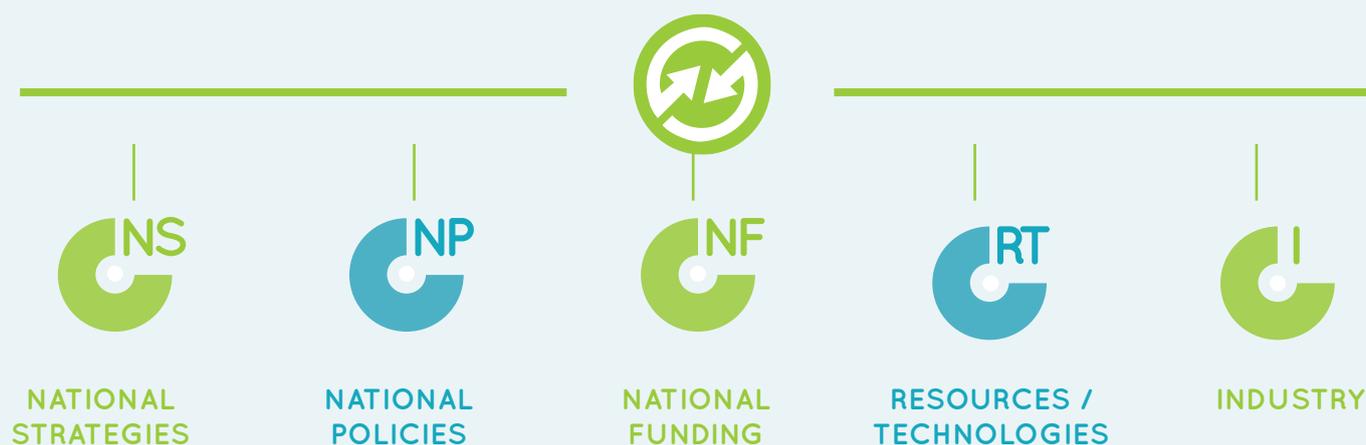


Figure 1. The five areas of the alignment plan of JPIAMR

NATIONAL



STRATEGIES

- Most of the countries within the JPIAMR have a National Strategy for AMR or are in the process of developing one.
- For countries with an AMR strategy, it is necessary to engage with the key stakeholders within the different countries to introduce the Strategic Research Agenda (SRA) and identify complementary interests to work towards common goals (S/M).
- For countries that do not have a strategy, it is essential that the profile of AMR is raised at conferences and meetings and the SRA is presented as a way forward (S/M/L).
- Identifying the national funders and experts within AMR in these countries would enable input into the development of a strategy (S/M).
- Any future strategy under development would ideally be aligned with the research themes in the SRA (M/L)

The JPIAMR Phase 2 mapping exercise has identified the countries that have an AMR strategy in place (S) (Table 1). The JPIAMR should work across all countries to promote the research themes within the SRA and assist those currently developing a strategy.

NATIONAL



POLICIES

- It is essential that the gap between research and policy is addressed, which requires more communication and interaction between key researchers and policy makers in all areas including public health, animal and environmental (M/L).
- Engaging politicians and policymakers help raise awareness of the research conducted and its potential impact. Discussions at early stages would help define research priorities which can be translated into policy and practice (S/M/L).
- The Phase 2 mapping exercise has collected some of the existing policies related to AMR and infection (S) (Table 2). This was a challenging exercise as many of the local and national policies are not well documented.
- Member States should consider these policies and whether some could be adopted widely (M/L).

Workshops organised by JPIAMR (such as the diagnostics workshop in London) brought together researchers, policy makers, clinicians, veterinarians and representatives from industry for discussions on the challenges of developing good diagnostic tools for AMR (M/L)

NATIONAL



FUNDING

- The Phase 1 mapping exercise collated information on AMR relevant research funded nationally by 21 Member States (Kelly et al, in press). This mapping highlighted the need for more available funding for AMR on a national level and the added value of jointly funded research (S/M/L).
- Different funding models should be considered including public-private partnerships and linking with policymakers and end users. Better coordination across countries would ensure resources are better exploited (M/L).
- Stronger national and cross country alignment of funding would add value to the current landscape of research and would avoid duplication (M/L).
- JPIAMR is considering different funding mechanisms that would add value to existing programmes of work, including supporting research projects that will build on the strength of existing research in the Member States. The first two transnational calls launched in 2015 led to 7 projects being funded; early 2016 will see the research networks call being launched across countries with the aim of linking different experts together (S/M/L).

An intergovernmental Workshop held in Paris on the 17th November 2015 brought together ministries, agencies and funding bodies to discuss the current situation of AMR funding in each country and to discuss ways to add value to new and existing programmes of work, through cooperation and coordination within and between countries and discuss the challenges associated with transnational funding (M/L).



www.jpiamr.eu/activities/workshops/intergovernmental-workshop/

RESOURCES



TECHNOLOGIES

- It is important to identify AMR relevant resources both nationally and between countries. This includes available biobanks, clinical samples, data sets as well as technologies that can enable AMR relevant research (S/M).
- Standardisation of technologies, methodologies and data collection would facilitate the use of data generated by different groups (M/L). Networking events focusing on areas such as innovation and enabling technologies and research infrastructures may also be explored.
- Discussions between researchers around sharing data, information and resources would help reduce costs and promote cross country working (S/M).
- A workshop held in Amsterdam on the 28th October 2015 aimed to devise a plan of approach to (better) share data, collections, samples and re-use them in the AMR domain. As preparation for the meeting, JPIAMR carried a short survey on knowledge about and use of Research Infrastructures (RI's) within the field of antimicrobial resistance. The survey was open to all scientists and other interested parties who are involved in this field. The answers from this survey will be presented at the meeting (link) (S/M).

A workshop held in Amsterdam on the 28th October 2015 aimed to devise a plan of approach to (better) share data, collections, and samples and re-use them in the AMR domain. As preparation for the meeting, JPIAMR carried a short survey on knowledge about and use of Research Infrastructures (RI's) within the field of antimicrobial resistance. The survey was open to all scientists and other interested parties who are involved in this field. The answers from this survey will be presented at the meeting (S/M).



www.jpiamr.eu/activities/workshops/research-infrastructures-workshop/

INDUSTRY



■ The Phase 2 mapping exercise has identified a large number of companies (over 300) with interest in AMR and how different countries are engaging with industry (S) (Table 3).

■ Working in collaboration with pharmaceutical companies and small and medium enterprises is crucial to the success of AMR research especially

when developing new therapeutics and diagnostics tools. Mechanisms to enable closer working between academics and industry (through jointly funded studentships or research projects) should be considered. This would allow expertise, skills and experience to be shared and advice on lessons learnt and best practice to be delivered (M/L).

A JPIAMR industry working group has been established to enable an environment for information exchange. Early discussions with Innovative Medicines Initiative (IMI), the European Federation of Pharmaceutical Industries and Associations (EFPIA), as well as individual companies are underway (S/M/L).

NEXT STEPS FOR ALIGNMENT

Information and burden sharing can prevent duplication of effort and enable the highest quality research to be funded, the output of that research underpinning future policy developments in the AMR area. Alignment requires innovative approaches and it must be recognised that this will change and develop over time as research priorities. Good practices of alignment should be further developed and eventually become best practices, shared among JPIs and promoted throughout Member States. Evaluating progress in this area is important to ensure the JPIAMR is achieving its aim.

Table 1. The countries within JPIAMR that report having a National Strategy on AMR as of March 2015

Total Number of Countries Providing Data	Countries Reporting having an AMR National Strategy	Countries in the Process of Developing a Strategy	Countries Reporting no National Strategy (or plans to develop one)
18	12	3	3

Table 2. The countries within JPIAMR that have a policy or guidelines on AMR or infection

COUNTRY	HUMAN	ANIMAL
Argentina	Not supplied	Not supplied
Belgium	BAPCOC, website www.health.belgium.be/Antibiotiques/index.htm?fodnlang=en	AMCRA 2020 Policy www.amcra.be/sites/default/files/files/AMCRA%202020%20finaal_EN(1).pdf
Canada	The Public Health Agency of Canada has developed infection prevention and control and prescribing guidelines, including those specific to AMR bacteria.	Notice to stakeholders www.hc-sc.gc.ca/dhp-mps/vet/antimicrob/amr-notice-ram-avis-20140410-eng.php
Czech Republic	Action Plan www.szu.cz/narodni-antibioticky-program	Not supplied
Denmark	Denmark Joint Antibiotic Resistance Action Plan www.sum.dk/Aktuelt/Nyheder/Sundhedspolitik/2010/Maj/-/media/Filer%20-%20dokumenter/Antibiotikaresistens/Handlingsplan_mod_antibiotikaresistens.ashx	Denmark Joint Antibiotic Resistance Action Plan www.sum.dk/Aktuelt/Nyheder/Sundhedspolitik/2010/Maj/-/media/Filer%20-%20dokumenter/Antibiotikaresistens/Handlingsplan_mod_antibiotikaresistens.ashx
Estonia	Policies in place for prescribing antibiotics and infection control requirements in health care settings. To be updated in 2015.	Recommendations on antibiotic use www.vet.agri.ee/static/files/1289_antibiootikumide%20kasutamine%20eri%20loomliikide%20puhul.pdf ; www.vet.agri.ee/static/files/1290.ab%20kasutamine%20veised.pdf www.vet.agri.ee/static/files/1291.AB%20kasutamine%20sead.pdf
Finland	Guidelines www.julkari.fi/handle/10024/116266 www.thl.fi/documents/10531/163131/Rekommendation_f%C3%B6r_diagnostik_av_karbapenemasproducerande_bakterier_v1.0.pdf www.thl.fi/documents/10531/163131/Rekommendation_f%C3%B6r_diagnostik_av_ESBL_v1.0.pdf	Not supplied
France	Antibiotics Plan www.plan-antibiotiques.sante.gouv.fr/-DGS-.html www.hcsp.fr/explore.cgi/avisrapportsdomaine?clefr=372	Antibiotics Plan www.plan-antibiotiques.sante.gouv.fr/-Afssaps-.html www.plan-antibiotiques.sante.gouv.fr/-HAS-.html www.plan-antibiotiques.sante.gouv.fr/-DHOS-.html

Germany	<p>Guidance</p> <p>www.rki.de/EN/Home/homepage_node.html</p> <p>www.gesetze-im-internet.de/bundesrecht/ifsg/gesamt.pdf</p> <p>www.dgkh.de/pdfdata/MedHygVo/MedHygVO_NRW_13032012.pdf</p>	www.fli.bund.de/en/startseite/home.html
Greece	Not supplied	Not supplied
Israel	Multiple policies and guidelines are in place related to infection control, AMR control, and antibiotic stewardship	Animal feed guidelines are in progress
Italy	<p>National Prevention Plan</p> <p>www.ccm-network.it/pagina.jsp?id=node/1829&idP=89&idF=935</p>	<p>Guidance on antibiotic use in animals</p> <p>www.salute.gov.it/portale/news/p3_2_1_1_1.jsp?lingua=italiano&menu=notizie&p=dalministero&id=2245</p>
Japan	<p>Guidance on the treatment of specific organisms</p> <p>www.mhlw.go.jp/bunya/kenkou/kekkaku-kansenshou1/01-05-42-01.html</p> <p>www.nih.go.jp/niid/ja/kansennohanashi/433-mdr-pa.html</p> <p>www.nih.go.jp/niid/ja/kansennohanashi/469-vre.html</p> <p>www.mhlw.go.jp/bunya/kenkou/kekkaku-kansenshou1/01-05-140912-4.html</p> <p>www.kansensho.or.jp/guidelines/pdf/guideline_mrsa_2014.pdf</p>	Not supplied
Latvia	No national guidelines, but there are 'Regulations Regarding the Basic Requirements for a Hygienic and Counter-Epidemic Regimen in a Medical Treatment Institution (574/2006)' in Latvia	Not supplied
Netherlands	Reduction of antibiotic use in clinical care (SWAB) and infection prevention (WIP). Regulations in place that prevent over the counter sales of antibiotics. Surveillance of Hospital acquired infections as part of quality legislation. Strong supervision through Health Care Inspectorate.	Progressive policy towards the reduction of antibiotics in veterinary health.
Norway	<p>Use of antibiotics</p> <p>www.helsedirektoratet.no/publikasjoner/nasjonale-faglige-retningslinjer-for-antibiotikabruk-i-primerhelsetjenesten/Publikasjoner/IS-2030_netto_low.pdf</p> <p>www.fhi.no/dokumenter/9bc2e5e450.pdf</p> <p>www.legeforeningen.no/Fagmed/Norsk-barnelegeforening/Veiledere/veileder-i-akutt-pediatri/kapittel-3-infeksjoner/</p>	Not supplied
Poland	<p>Antibiotic plan</p> <p>www.antybiotyki.edu.pl</p>	Not supplied
Romania	<p>Website</p> <p>www.ms.ro/?pag=181;</p>	<p>Website</p> <p>www.ansvsa.ro/?pag=845</p>
Spain	<p>Antibiotic guide</p> <p>www.antibioticos.msc.es/guias.htm</p>	<p>Antibiotic guide</p> <p>www.aemps.gob.es/</p>

Sweden	The National Board of Health (Socialstyrelsen) and The Swedish Board of Agriculture has a governmental mission to coordinate an action plan at the national level since 2012	Not supplied
Switzerland	Website www.bag.admin.ch/gesundheit2020/index.html?lang=en	Not supplied
Turkey	Website www.uamdss.thsk.gov.tr/ www.resmigazete.gov.tr/eskiler/2005/08/20050811-6.htm	Strategic Plan http://www.tarim.gov.tr/SGB/Belgeler/2013-2017/Stratejik_Plan2010-2014.pdf
UK	Guidance and information www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance www.nice.org.uk/news/article/tackling-the-rise-in-antibiotic-resistance www.his.org.uk/files/3113/8693/4808/epic3_National_Evidence-Based_Guidelines_for_Preventing_HCAI_in_NHSE.pdf www.rcgp.org.uk/TARGETantibiotics/ www.gov.uk/government/uploads/system/uploads/attachment_data/file/417032/Start_Smart_Then_Focus_FINAL.PDF www.survivingsepsis.org/Guidelines/Pages/default.aspx	Guidance www.beva.org.uk/useful-info/Vets/Guidance/AMR

Table 3. The countries within JPIAMR that demonstrate links with industry

	Number of countries
Countries providing data	18
Countries reporting organisation that can directly fund industry	16
Countries reporting organisation that can indirectly fund industry	10
Countries reporting dedicated calls to AMR (that encourage participation)	3
Countries reporting methods of good practice for engaging and working with industry	9